

## **SELF-SYNCHRONIZING PSEUDORANDOM BIT SEQUENCE CHECKER**

### **Abstract of the Disclosure**

Self-synchronizing techniques for checking the accuracy of a pseudorandom bit sequence (PRBS) are provided. The PRBS being checked may be generated by a device  
5 (e.g., a device under test) in response to a PRBS received by the device (e.g., from a PRBS generator). In an aspect of the invention, a PRBS checking technique includes the following steps/operations. For a given clock cycle, the presence of an error bit in the PRBS generated by the device is detected. The error bit represents a mismatch between the PRBS input to the device and the PRBS output from the device. Then, propagation of  
10 the error bit is prohibited for subsequent clock cycles. The prohibition step/operation may serve to avoid multiple errors being counted for a single error occurrence and/or masking errors in the PRBS output by the device.